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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,877

10/06/2006

Andreas Kramer

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OLIFF & BERRIDGE, PLC
P.O. BOX 320850
ALEXANDRIA, VA 22320-4850

EXAMINER

MCCULLEY, MEGAN CASSANDRA

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

11/18/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction27049@oliff.com
jarmstrong@oliff.com

Office Action Summary	Application No. 10/538,877	Applicant(s) KRAMER ET AL.	
	Examiner Megan McCulley	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 1-21 and 27-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/8/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group II, claims 22-26 in the reply filed on August 7, 2009 is acknowledged. The traversal is on the ground(s) that there is no evidence of lack of unity of invention based on the newly amended claims. This is not found persuasive because Suga (US 2003/0105266) teaches compound (B-1) prepared by blocking a polyisocyanate compound with an epoxy compound having a hydroxyl group (para. 136). The polyisocyanate is a reaction of aliphatic or aromatic diisocyanates (para. 51), corresponding to the instant Y2, with a dihydric alcohol (para 52), corresponding to instant Y1). The epoxy compound having a hydroxyl group and epoxy groups can be trimethylolpropane diglycidyl ether (para. 138), corresponding to the instant Y3. Therefore, q is 2, m is 1 and n is 2.

Further, Chen et al. (U.S. Pat. 5,484,853) teaches a modified urethane prepolymer having at least two epoxy groups (col. 2 lines 30-40), which means q is 1 or higher. The polyisocyanate is made from aromatic diisocyanates (col. 3 lines 60-67) and low molecular weight aliphatic glycols (col. 4 lines 1-5)

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-21 and 27-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable

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generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 7, 2009.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Suga (US 2003/0105266).

Regarding claim 22: Suga teaches compound (B-1) prepared by blocking a polyisocyanate compound with an epoxy compound having a hydroxyl group (para. 136). The polyisocyanate is a reaction of aliphatic or aromatic diisocyanates (para. 51), corresponding to the instant Y2, with a dihydric alcohol (para 52), corresponding to instant Y1). The epoxy compound having a hydroxyl group and epoxy groups can be trimethylolpropane diglycidyl ether (para. 138), corresponding to the instant Y3. Therefore, q is 2, m is 1 and n is 2.

Regarding claim 23: Suga teaches ethylene glycol as the dihydric alcohol corresponding to Y1, which is an α,ω -polyalkylene glycol having C₂ alkylene groups.

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Regarding claim 24: Suga teaches the molecular weight is 400-10000 (para. 62), which is 200-5000 OH equivalent.

Regarding claim 25: Suga teaches a one component adhesive (para. 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 22-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Pat. 5,484,853) in view of Dalhuisen (U.S. Pat. 3,505,283).

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Regarding claims 22 and 23: Chen et al. teaches a compound made from aliphatic, cycloaliphatic or aromatic polyisocyanates (col. 3 lines 60-67), which would make Y_2 be aliphatic, cycloaliphatic or aromatic and $m=2$, reacted with low molecular weight glycols like ethylene glycol (col. 4 lines 1-5), which would make Y_1 be a C_2 polyalkylene glycol with $n=2$. The urethane prepolymer can also be end capped with a compound containing both hydroxyl and epoxy groups (col. 3 lines 39-45).

Not disclosed is a specific compound that has more than one epoxy group, which would make $q=2$. However, Dalhuisen teaches a similar compound end capped with epoxy resin of bisphenol A (col. 2 lines 5-30). Chen et al. and Dalhuisen are analogous art since they are both concerned with the same field of endeavor, namely epoxy end capped polyisocyanates. At the time of the invention a person having ordinary skill in the art would have found it obvious to combine the epoxy end capping group of Dalhuisen with the urethane of Chen et al. and would have been motivated to do so for such desirable properties as rapid viscosity increase to make handling easier without curing the composition, as evidenced by Dalhuisen (col. 1 lines 40-53).

Regarding claim 24: Chen et al. teaches a propylene oxide oligomer, which would have 2 hydroxyl groups, with a molecular weight of 300-2000 Daltons (col. 4 lines 1-5). Therefore the hydroxyl number would be 150-1000 g/mol, which falls within the claimed range.

Regarding claim 26: Chen et al. teaches a two-component composition (abstract).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Megan McCulley whose telephone number is (571)270-3292. The examiner can normally be reached on Monday - Thursday 7:30-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

/M. M./
Examiner, Art Unit 1796